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Reference P101764EPPC/DCO	Application No./Patent No. 02793453.8 - 1266 PCT/JP0213836
Applicant/Proprietor KABUSHIKI KAISHA TOSHIBA	

### Communication

The European Patent Office herewith transmits as an enclosure the supplementary European search report under Article 153(7) EPC for the above-mentioned European patent application.

If applicable, copies of the documents cited in the European search report are attached.

- ☐ Additional set(s) of copies of the documents cited in the European search report is (are) enclosed as well.

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### Refund of the search fee

If applicable under Article 9 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.





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**SUPPLEMENTARY  
EUROPEAN SEARCH REPORT**

Application Number  
**EP 02 79 3453**

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	EP 0 719 995 A (TOKYO SHIBAURA ELECTRIC CO [JP]) 3 July 1996 (1996-07-03)	1-7, 18	INV. F25D11/00
Y	* column 3, line 49 - column 8, line 5; figures 1-17 *	8-17, 19	F25D23/00
Y	EP 0 768 198 A (NIPPON DENSO CO [JP] DENSO CORP [JP]) 16 April 1997 (1997-04-16) * column 6, line 27 - column 11, line 2; figures 3, 6 *	8, 9, 12-17	
Y	US 5 337 575 A (ISHIHARA MICHIHARU [JP]) 16 August 1994 (1994-08-16) * the whole document *	15, 17	
Y	EP 0 936 417 A (MATSUSHITA ELECTRIC IND CO LTD [JP]) 18 August 1999 (1999-08-18) * paragraphs [0007], [0010], [0025], [0035], [0042], [0054], [0064], [0073], [0080] *	10, 11, 19 8, 9	
A	US 4 553 400 A (BRANZ MICHAEL A [US]) 19 November 1985 (1985-11-19) * figure 1 *	14-17	TECHNICAL FIELDS SEARCHED (IPC) F25B F25D
A	JP 10 111061 A (HITACHI LTD) 28 April 1998 (1998-04-28) * abstract *	1-19	
A	JP 10 009737 A (MATSUSHITA REFRIGERATION) 16 January 1998 (1998-01-16) * abstract *	1-19	
A	US 5 174 125 A (DUNCAN DONALD [CA]) 29 December 1992 (1992-12-29) * the whole document *	19	
The supplementary search report has been based on the last set of claims valid and available at the start of the search.			
Place of search <b>The Hague</b>		Date of completion of the search <b>28 February 2008</b>	Examiner <b>Léandre, Arnaud</b>
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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EPO FORM 1503 03 82 (P4C04)

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 02 79 3453

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on  
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28-02-2008

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			DE	69533303 T2	21-07-2005
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## Patent Abstracts of Japan

PUBLICATION NUMBER : 10111061  
PUBLICATION DATE : 28-04-98

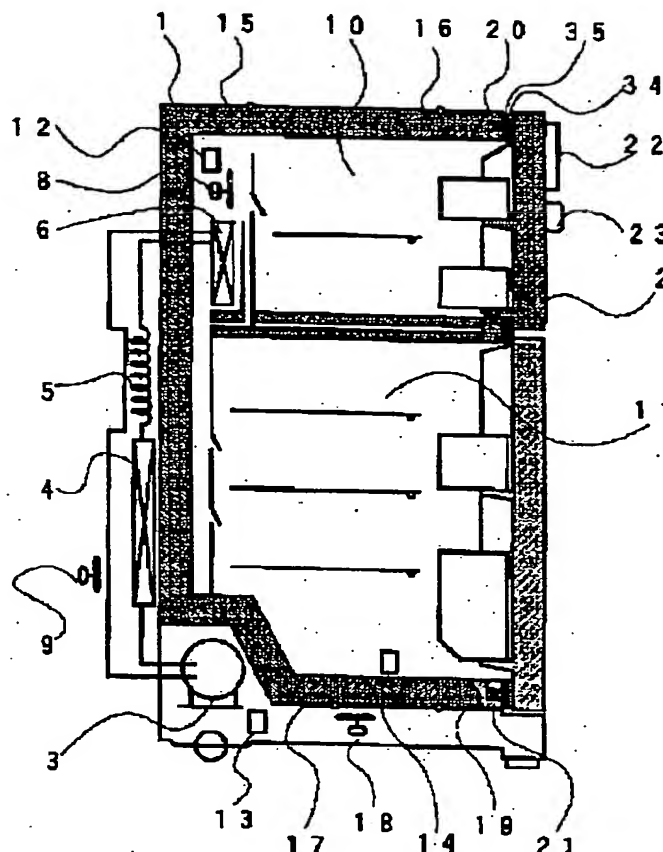
APPLICATION DATE : 04-10-96  
APPLICATION NUMBER : 08264044

APPLICANT : HITACHI LTD;

INVENTOR : HARUTA HARUKO;

INT.CL. : F25D 11/02 F25B 49/02 F25D 23/00

TITLE : REFRIGERATOR



**ABSTRACT :** **PROBLEM TO BE SOLVED:** To avoid dangers of an outbreak of fire and explosion when a refrigerant leaks in a refrigerator using a combustible refrigerant by opening a ventilating hole provided in a heat insulating box when a refrigerant leakage detector provided in the heat insulating box detects the refrigerant leakage.

**SOLUTION:** Irrespective of a refrigerator being operated or interrupted, if a refrigerant leakage detector 12 or 13 detects refrigerant leakage, a controller sends to a ventilating hole cover driving apparatus and a ventilating fan driving apparatus an instruction of starting of ventilation. The ventilating hole cover 17 is adapted such that its surface in contact with a heat insulation box 1 is a cylindrical one or a spherical one, and the ventilating hole driving apparatus is located at the center of the cylindrical surface or the spherical surface. Once the controller receives the instruction of starting of ventilation, the ventilating hole driving apparatus rotates the ventilating hole cover 17 by 90 degree anticlockwise with itself taken as the center to communicate the refrigerator and the outside of the refrigerator. Simultaneously, the ventilating fan driving apparatus starts the fan 18 to discharge leaked refrigerant to the outside of the refrigerator.

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## Patent Abstracts of Japan

PUBLICATION NUMBER : 10009737  
PUBLICATION DATE : 16-01-98

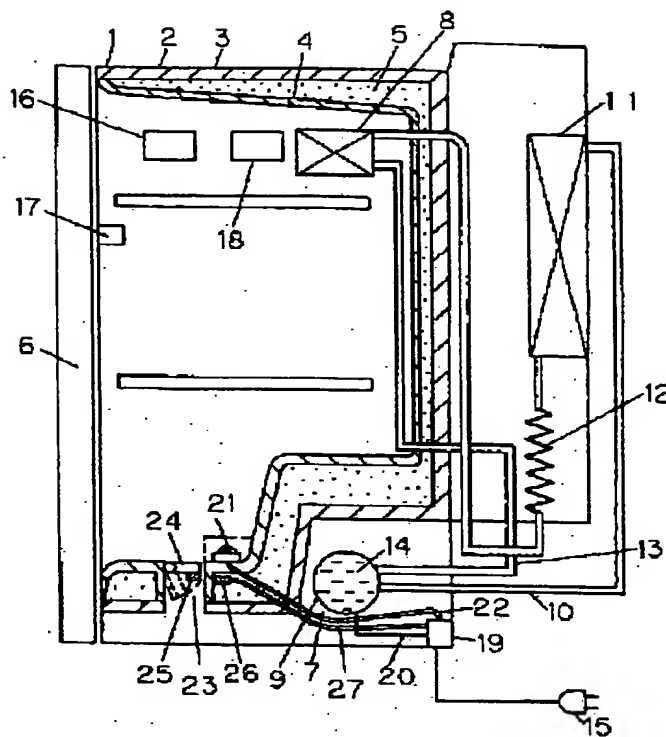
APPLICATION DATE : 19-06-96  
APPLICATION NUMBER : 08157867

APPLICANT : MATSUSHITA REFRIG CO LTD;

INVENTOR : TAKAICHI KENJI;

INT.CL. : F25D 11/00 F25B 49/02 F25B 49/02  
F25D 23/00

TITLE : REFRIGERATOR



**ABSTRACT :** **PROBLEM TO BE SOLVED:** To reduce a possibility of ignition of hydrocarbon refrigerant in the case that the refrigerant of hydrocarbon leaks into a refrigerator due to breakage of a pipe or the like.

**SOLUTION:** This refrigerator comprises a heat-insulated box 2 having a compressor 9, a discharging pipe 10, a condenser 11, a capillary tube 12, an evaporator 8 and a suction pipe 13 connected in sequence in an annular form and also having a cooling cycle with hydrocarbon refrigerant 14 enclosed therein; a hydrocarbon gas sensor 21 mounted inside the heat insulated box 2; and a solenoid operated lid 23 arranged at the bottom part of the heat-insulated box 2 and released in cooperation with the hydrocarbon gas sensor 21.

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